IN THE SPECIFICATION

Please amend the paragraphs of the specification as follows:

On page 4, please replace paragraph [1021] with the following paragraph:

A method is disclosed for correcting a sleep clock of a wireless ~~communications~~ communication device. Sleep oscillator frequency is estimated so as to compensate for estimated temperature induced errors. In estimating temperature induced errors, errors in sleep oscillator frequency are treated as being temperature induced errors, but probable multipath errors are bounded to predetermined sleep clock error maxima corresponding to sleep duration over which the error occurred.

On page 4, please replace paragraph [1023] with the following paragraph:

FIG. 1B illustrates a wireless communications device 100, which in this example is a wireless telephone. The device 100 includes a speaker 108, user interface 110, microphone 114, transceiver 104, antenna 106, data processing equipment 102, and a sleep clock 116, along with any other conventional circuitry that may vary depending upon the communications technology, application, phone features, etc. The equipment 102 may comprise one or more logic circuits, discrete circuit elements, application specific integrated circuits (ASICs), microprocessors, computers, or other apparatus. Various specific examples are discussed below in conjunction with ~~FIGURES~~ FIGs. 2-3. The equipment 102 serves to manage operation of the components 104, 108, 110, and 114 as well as signal routing between these components.

On page 6, please replace paragraph [1028] with the following paragraph:

To more specifically explain the unit 180, FIG. 1C describes a control loop 178. The loop 178 models the operation of the unit 180, rather than describing actual circuit components. At 185, the loop 178 receives a timing error. Rather than seconds or minutes, the timing error in this example is described in terms of parts of CDMA chips. Signal 185 represents the overall error in the duration of the last sleep state, that is, how early or late the last sleep cycle ended,

measured in CDMA chips. This error is obtained from the system reacquisition process. In some cases, this error may be on the order of one CDMA chip.

On page 6, please replace paragraph [1029] with the following paragraph:

The error between the estimated and the actual frequency is 183, but this frequency error is not observed directly, only the timing error 185 that results from it. To model the fact that the timing error rather than the frequency error is observed, the frequency error 183 is multiplied by 184b at 184a. This operation is performed naturally, rather than by affirmative acts of circuitry or programming. The following illustrates an example. In this example, the frequency estimate is 600.00 cx16 per sleep clock cycle (cx16 is a 16th part of one CDMA chip) and the desired sleep state duration is 1.28s, which is equivalent to 1.28*16*1.2288e6=25165824 cx16. Here, 25165824cx16 corresponds to 41943 sleep clock cycles when the estimate of 600.00 cx16_per_clk is used. Next, sleep occurs for that many sleep clock cycles. If the true frequency is 600.01 cx16 per sleep clock cycle, the phone did not sleep for 25165824 cx16 as desired, but rather for 41943*600.01cx16=25166219cx16 or 1.28002... seconds. Thus, when reacquiring the ~~systems~~ system, an error of 25166219-25165824=395 cx16 (approximately 25 chips) is observed.

On page 7, please replace paragraph [1034] with the following paragraph:

Data processing entities such as components 102, 180, 116, 104 of ~~FIGURES~~ FIGs. 1B, or any one or more of their subcomponents, may be implemented in various forms. One example is a digital data processing apparatus, as exemplified by the hardware components and interconnections of the digital data processing apparatus 200 of FIG. 2.

On page 8, please replace paragraph [1039] with the following paragraph:

Wherever any functionality of the present disclosure is implemented using one or more machine-executed program sequences, such sequences may be embodied in various forms of signal-bearing media. In the context of FIG. 2, such a signal-bearing media may comprise, for example, the storage 204 or another signal-bearing media, such as a removable data storage media 300 (FIG. 3), directly or indirectly accessible by a processor 202. Whether contained in

the storage [[206]] 204, media 300, or elsewhere, the instructions may be stored on a variety of machine-readable data storage media. Some examples include direct access storage (e.g., a conventional "hard drive", redundant array of inexpensive disks ("RAID"), or another direct access storage device ("DASD")), serial-access storage such as magnetic or optical tape, electronic non-volatile memory (e.g., ROM, EPROM, flash PROM, or EEPROM), battery backup RAM, optical storage (e.g., CD-ROM, WORM, DVD, digital optical tape), paper "punch" cards, or other suitable signal-bearing media including analog or digital transmission media and analog and communication links and wireless communications.

On page 10, please replace paragraph [1045] with the following paragraph:

In step 410, the unit 180 selectively "bounds" the error measured in step 408. Namely, based on the magnitude of the error and the error history, the unit 180 selectively limits the error to a prescribed maximum value. This helps to eliminate multipath errors from being considered in adjusting the sleep clock for temperature errors. In one example, step 410 uses a predetermined relationship between sleep state duration and predetermined sleep clock error maxima to identify an appropriate maximum error, and selectively limits the current error to the identified maximum error. FIG. 6 shows an example graph of sleep clock error maxima for different sleep times. The details [[a]] bounding a routine are discussed in greater detail below, with reference to FIG. 5.

On page 10, please replace paragraph [1046] with the following paragraph:

Next, in step 412, the unit 180 estimates the actual operating frequency of the sleep clock 116 by using the bounded error (from 410). In one embodiment, this is performed by adjusting the previous estimate which arrived from step 402 if the routine 400 is completing for the first time, or otherwise from the last performance of step 412. Although the selection and bounding of errors is novel, the operation of estimating actual operating frequency of sleep clock based on certain measured errors is known in the art, and moreover finds implementation in various commercially available products such as the Verizon model 7135 CDMA phone.

On page 13, please replace paragraph [1057] with the following paragraph:

FIG. 6 shows a graph 600 to illustrate one embodiment for bounding maxima to be used in step 520. The horizontal axis represents sleep time and the vertical axis represents temperature induced sleep clock error. Boundary 608 illustrates a theoretical, worst-case temperature drift scenario developed through research and discovery of the present inventors. Boundary 602 illustrates a modified representation of the boundary 608, including portions 604, 606. Portion 606 is a linear approximation of the boundary 608 above an error threshold [[605]], implemented to conserve computational resources by using a mathematically simpler linear limit. Portion 604 is a base minimum, which purposefully does not follow the theoretical boundary 608. Namely, the portion 604 is established with a sufficiently high value to avoid bounding errors that are probably caused by noise, the switching process of the sleep clock 116, or other sources unrelated to temperature errors. The imposition of portion 604 thereby prevents churning, jitter, and excessive analysis of unpredictable and probably irrelevant errors.